

## Patent claims

1. A polyester film which has at least one base layer (B) and has at least one matt overlayer (A), wherein the overlayer (A) comprises particles which have a median particle diameter  $d_{50}$  of from 2 to 10  $\mu\text{m}$  and have a SPAN98 smaller than or equal to 2, and wherein the overlayer (A) comprises a polyester which has from 4 to 30 mol% of isophthalic acid units, based on the total amount of acid in the polyester in this layer.
2. The polyester film as claimed in claim 1, wherein the particle concentration in the overlayer (A) is from 10 000 to 70 000 ppm, based on the total weight of this layer.
3. The polyester film as claimed in claim 1, wherein the particle diameter  $d_{50}$  is from 2.2 to 9  $\mu\text{m}$ .
4. The polyester film as claimed in claim 1, wherein the polyester present in the overlayer (A) contains from 6 to 28 mol% of isophthalic acid units.
5. The polyester film as claimed in claim 1, wherein the particles present in the overlayer (A) have a SPAN98 smaller than or equal to 1.9.
6. The polyester film as claimed in claim 1, wherein the particles present in the overlayer (A) are at least one of either organic or inorganic particles.
7. The polyester film as claimed in claim 1, wherein the polyester present in the overlayer (A) is a copolyester which comprises terephthalate units, isophthalate units, and ethylene glycol units.
8. The polyester film as claimed in claim 1, wherein the base layer (B) is composed of at least 80% by weight of a thermoplastic polyester.

9. The polyester film as claimed in claim 8, wherein the thermoplastic polyester of the base layer (B) contains at least one of either terephthalic acid units and ethylene glycol units, or naphthalene-2,6-dicarboxylic acid units and ethylene glycol units.
10. The polyester film as claimed in claim 8, wherein polyethylene terephthalate is used as thermoplastic polyester for the base layer (B).
11. The polyester film as claimed in claim 1, wherein no external particles are present in the base layer (B).
12. The polyester film as claimed in claim 1, which has an ABC layer structure, (A) and (C) being the overlayers, which are identical or different.
13. The polyester film as claimed in claim 1, which has a planar orientation  $\Delta p$  smaller than or equal to 0.170.
14. The polyester film as claimed in claim 1, which has an opacity smaller than 45%.
15. The polyester film as claimed in claim 1, which has a volume opacity smaller than 15%.
16. The polyester film as claimed in claim 1, which has a transparency greater than 80%.
17. The polyester film as claimed in claim 1, wherein the matt overlayer (A) has a gloss smaller than 70.

18. A process for producing a polyester film as claimed in claim 1, encompassing the steps of:
  - a) production of a multilayer film via coextrusion and shaping of the melts to give flat melt films,
  - b) biaxial stretching of the film, and
  - c) heat-setting of the stretched film.
19. Packaging film comprising polyester film as claimed in claim 1.
20. Packaging film as claimed in claim 19, wherein the packaging procedure takes place on high-speed packaging machinery.